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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TRAN, NHAN T

ART UNIT PAPER NUMBER

2615

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/629,982

Applicant(s)

KAKU, JUNYA

Examiner

Nhan T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/1/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. In the Applicant's arguments filed 8/6/2004, the Applicant states that the Examiner failed to consider the IDS filed on April 1, 2003. In response, the Examiner respectfully submits that the Examiner did consider and initialed the IDS filed on April 1, 2003. However, as requested by the Applicant, the Examiner re-submits a copy of the initialed IDS that was already considered on 5/12/2004.

2. Applicant's arguments filed 8/6/2004 have been fully considered but they are not persuasive.

Regarding currently amended claim 1 & newly added claim 5, the Applicant asserts (Remarks, page 11) that the combination of Mitsuhashi and Anderson fails to disclose or remotely suggest anything about (1) outputting toward the monitor default image data when the instruction key is operated and (2) outputting **one** of the photographed still image data and the photographed moving image data depending upon the state of the instruction key after outputting the default image data or (3) determining whether or not the instruction key is in the operative state at the specific timing at which the next recording process is enabled so as to permit/prohibit the displaying operation of the still image depending upon the determination result.

In response, the Examiner respectfully disagrees with the Applicant on how the claim limitations being read:

(1) The flicker image data is generated and output to the display in response to the shutter button 404 being depressed (col. 10, lines 1-5) as taught by Anderson is considered as a default image data since such flicker image data is momentarily displayed as a black or blank screen which is appeared as an uniform color image in a default condition of image data.

(2) The basic operations of a single shutter button for capturing an image and reviewing the captured image have already taught by Mitsuhashi. See Mitsuhashi, Fig. 2 and col. 6, line 30 – col. 7, line 5. It is clear that when the shutter button is shifted to a first pushed level from a second pushed level without releasing the button, the last captured image is displayed on the display unit. Mitsuhashi is just silent about a default image outputter for outputting toward the monitor default image data when the instruction key is operated. However, Anderson has compensated this deficiency in Mitsuhashi by a teaching of outputting the flicker image data (default image data) in response to the shutter button being pushed to capture an image so as to signal to the user that the desired image is being captured. Those skilled in the art would also recognize that the flicker image data is displayed in a very short period of time compared to the 2 seconds of wait time in Mitsuhashi during the first pushed level is still in active state. Therefore, the combined teachings of Mitsuhashi and Anderson would be implemented for “outputting **one** of the photographed still image data ...depending upon the state of the instruction key **after** outputting the default image data.”

(3) “a specific timing” is the time when the user pushes the shutter button. In this view, after a first capture/review of an image, a next capture/review of an image is determined and executed when the shutter button is pushed to the second level at that specific timing. The display unit is allowed to display the captured still image when the shutter button is pushed to the

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first level (note that both first and second levels are an operative state of the shutter button) and stop displaying the captured still image when shutter button is not pushed, in which the display is returned to the live view mode or so called EE mode. See Mitsuhashi, col. 6, line 57 – col. 7, line 15. Therefore, the combination of Mitsuhashi and Anderson also meets the claim limitation of determining whether or not the instruction key is in the operative state at the specific timing at which the next recording process is enabled so as to permit/prohibit the displaying operation of the still image depending upon the determination result.

Regarding amended claim 3, the Applicant further asserts (Remarks, pages 11-13) that Anderson fails to disclose or suggest the features of claim 3 concerning *a single-color image displayer to display on said monitor a single-colored image for a predetermined time after said instruction key has been operated...* However, the Applicant argues for the limitation “a single-color image” that is not corresponding to the claim. The argument is moot. The Examiner assumes that the Applicant would like to refer to the amended “a default image.” Thus, Examiner respectfully submits a similar explanation as provided for claims 1 & 5 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1- 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsuhashi et al (US 5,497,193) in view of Anderson (US 6,512,548).

Regarding claim 1, Mitsuhashi discloses a digital camera which performs a moving image output process (live view or EE mode) for outputting toward a monitor (display unit 14) photographed image data via an internal memory (inherent buffer of camera block 13) when an instruction key is not operated, and performing recording process for recording to a recording medium (storage unit 19) photographed still image data via the internal memory when the instruction key is operated (see Figs. 1 & 2; col. 6, line 20 – col. 7, line 15) comprising:

a determiner (control unit 15) for determining whether or not the instruction key (shutter button 20) is in an operative state (col. 5, lines 47-67, and *note that both first and second levels are considered as an operative state of the shutter button*);

a still image outputter for outputting toward the monitor the photographed still image data when a determination result of the determiner is affirmative (col. 5, lines 47-67 and col. 6, line 58 – col. 7, line 5); and a resumer for resuming the moving image outputting process when the determination result of the determination is negative (col. 7, lines 6-15).

Mitsuhashi does not explicitly teach that the moving image data has a first resolution and the photographed still image data has a second resolution, and that a default image outputter outputs toward the monitor default image data when the instruction key is operated. Mitsuhashi also fails to teach that after outputting the default image data, the determiner determines whether or not the instruction key is in an operative state.

As taught by Anderson, frames of raw image data are sequentially captured by an imaging device 114 and displayed at **reduced resolution** suitable for LCD screen 402 in a live view mode in a conventional way before the shutter button 418 is pressed to capture an image,

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and when the user presses the shutter button to capture an image, the raw image data is captured at a different resolution (i.e., higher resolution) set by the user (see col. 7, lines 7-27). Anderson further teaches when the user depresses the shutter button 404, there is a brief response indicating the image has been captured, such as a flicker or a very brief freezing of the image on the LCD screen 402 (col. 10, lines 1-5).

Therefore, it would have been obvious to one of ordinary skill in the art to modify Mitsuhashi by including the teaching of Anderson to provide reduced images on the display unit for a live view and record still image data at a higher resolution in a conventional way and also for outputting toward the display unit a default image data (i.e., flicker image data) when the shutter button is operated for indicating to the user that the image has been captured, wherein the control unit further determines whether or not the shutter button is in an operative state after outputting the default image data so that the captured image is displayed on the display unit for the user to review.

Regarding claim 2, Mitsuhashi in view of Anderson also teaches that the determiner (the control unit) repeatedly performs determining operation (see control loop of the control unit shown in Fig. 2 in Mitsuhashi) and the still image outputter performs an outputting operation for a time period (as long as the shutter button is being pushed) that the determination result is affirmative (Mitsuhashi, col. 6, line 57 – col. 7, line 5).

Regarding claim 3, see the analysis of claims 1 & 2. Furthermore, since the flicker image data is displayed in a predetermined timing manner of one or more operating clock cycles after

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the shutter button is pressed, “a default image displayer to display on said monitor a default image for a predetermined time after said instruction key has been operated, wherein said determiner determines a state of said instruction key after lapse of the predetermined time” is also met by the combined teachings of Mitsuhashi and Anderson.

Regarding claim 4, Anderson also teaches that the predetermined time **corresponds** (within a time interval but not necessarily to be exact match) to a time required for a process of recording the still image by the recorder (Anderson, col. 10, line 1-9, wherein the flicker is displayed **within** the time required for recording the image).

Regarding claim 5, see the analysis of claim 1. In addition, “a specific timing” is the time when the user pushes the shutter button. In this view, after a first capture/review of an image, a next capture/review of an image is determined and executed when the shutter button is pushed to the second level at that specific timing. The display unit is allowed to display the captured still image when the shutter button is pushed to the first level (note that both first and second levels are an operative state of the shutter button) and stop displaying the captured still image when shutter button is not pushed, in which the display is returned to the live view mode or so called EE mode. See Mitsuhashi, col. 6, line 57 – col. 7, line 15. Therefore, the combination of Mitsuhashi and Anderson also meets the claim limitations “a determiner for determining whether or not said instruction key is in the operative state at a specific timing at which a next recording process by said recorder is enabled; and a controller for permitting a displaying operation of said second displayer when a determination result of said determiner is affirmative, and prohibiting

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the displaying operation of said second displayer when the determination result of said determiner is negative.”

Regarding claim 6, Mitsuhashi clearly discloses that the captured still image data is displayed on the display unit as a review image for as long as the shutter button is maintained in the operative state (col. 7, lines 4-6).

Regarding claim 7, see the analysis of claim 1, wherein a flicker image data is displayed in a quick manner when the shutter button is pressed.

Regarding claim 8, also taught by Mitsuhashi in col. 4, lines 42-44 or Anderson in col. 7, lines 24-28, a memory (RAM) is used for temporarily storing the image data output from the imaging device for recording and either directly or indirectly displaying on the display unit.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (703) 605-4246. The examiner can normally be reached on Monday - Thursday, 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NT.


NGOC-YEN VU
PRIMARY EXAMINER